CLAIMS

WE CLAIM:

5   1. A method comprising:

    characterizing an I/O model;

    creating a set of behavioral models based on the characterizing; and

    comparing the set of behavioral models to the I/O model.

10   2. The method of claim 1, further comprising:

    selecting a simulator input fragment for the characterizing.

    3. The method of claim 1, wherein the characterizing further comprises:

    calculating a driver output open circuit voltage.

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    4. The method of claim 1, further comprising:

    calculating a driver equivalent output impedance.

    5. The method of claim 1, wherein the comparing further comprises:

20   creating decks comprising a net topology for the I/O model and the set of

    behavioral models;

    simulating the decks; and

    comparing output from the simulating.

25   6. An apparatus comprising:

    means for selecting a simulator input fragment;

    means for characterizing an I/O model using the simulator input fragment;

    means for creating a set of behavioral models based on the characterizing; and

    means for comparing the set of behavioral models to the I/O model.

7. The apparatus of claim 6, wherein the means for comparing further comprises:

    means for creating decks comprising a net topology for the I/O model and the set of behavioral models;

5   means for simulating the decks; and

    means for comparing output from the simulating.

8. The apparatus of claim 6, wherein the means for characterizing further comprises:

    means for calculating current-voltage curves for driver output.

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9. The apparatus of claim 6, wherein the means for characterizing further comprises:

    means for calculating voltage curves for an initial high driver model.

10. The apparatus of claim 6, wherein the means for characterizing further comprises:

15   means for calculating driver book delays.

11. A signal-bearing medium encoded with instructions, wherein the instructions when executed comprise:

    selecting a simulator input fragment;

20   characterizing an I/O model using the simulator input fragment;

    creating a set of behavioral models based on the characterizing; and

    comparing the set of behavioral models to the I/O model, wherein the comparing further comprises:

        creating decks comprising a net topology for the I/O model and the set of

25   behavioral models,

        simulating the decks, and

        comparing output from the simulating.

12. The signal-bearing medium of claim 11, wherein the characterizing further comprises:

     calculating a high-to-low receiver threshold voltage.

5   13. The signal-bearing medium of claim 11, wherein the characterizing further comprises:

     calculating a low-to-high receiver threshold voltage.

14. The signal-bearing medium of claim 11, wherein the characterizing further

10 comprises:

     calculating input impedance.

15. The signal-bearing medium of claim 11, wherein the characterizing further comprises:

15   calculating input capacitance.

16. A computer system comprising:

     a processor; and

     a storage device encoded with instructions, wherein the instructions when

20 executed on the processor comprise:

         selecting a simulator input fragment comprising configuration

information,

         characterizing an I/O model using the simulator input fragment,

         creating a set of behavioral models based on the characterizing, and

25   comparing the set of behavioral models to the I/O model, wherein the

comparing further comprises:

            creating decks comprising a net topology for the I/O model and the

set of behavioral models,

            simulating the decks, and

comparing output from the simulating.

17. The computer system of claim 16, wherein the characterizing further comprises:
   calculating receiver input slop compensation numbers.

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18. The computer system of claim 16, wherein the characterizing further comprises:
calculating dynamic receiver input noise thresholds.

19. The computer system of claim 16, wherein the behavioral models are independent of
10   cycle time, input pattern, and process points.

20. The computer system of claim 16, wherein the instructions further comprise:
selecting a base skeleton file comprising process, voltage, temperature, and rise/fall
times.

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